

**Effectiveness of the RRA Quality Assurance Program in  
Estimating Exposure to Improper Payments  
Report No. 03-01, October 9, 2002**

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**EXECUTIVE SUMMARY**

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This report presents the results of the Office of Inspector General's evaluation of the effectiveness of the Railroad Retirement Board (RRB) in estimating the agency's exposure to improper payments in Railroad Retirement Act (RRA) programs.

The President's Management Agenda, Fiscal Year 2002 includes a government-wide initiative for improved financial performance through the reduction of improper payments. The General Accounting Office has identified the systematic measurement of the extent of improper payments as a key step in addressing the problem. Absent such measurement, management cannot determine whether improper payments are significant enough to require corrective action, how much to cost-effectively invest in internal control systems to correct the problem, or the impact of the actions already taken to reduce improper payments.

The Office of Programs does not presently develop a comprehensive estimate of the monetary impact of improper payments. The agency has used the Office of Programs' annual studies of initial and post adjudication accuracy to report on the cost of improper payments since it was first required in FY 2001. The study methodology, developed nearly 15 years ago, responds to the question of adjudication accuracy within a very narrowly defined framework that does not adequately support the information needs associated with the initiative to reduce improper payments in Federal programs.

Our review of the methodology used to estimate RRA initial case and payment accuracy disclosed some weaknesses in the documentation, design and execution of the study.

- Key aspects of the study, such as the determination of sample size, the method of sample selection, and the formulae used to project case and payment accuracy, are not adequately documented. In addition, the treatment of certain types of errors is not entirely consistent with the study's published definitions.
- Study results are published without a final accuracy assessment for every case in the sample. Cases for which an accuracy decision could not be confirmed within the timeframe allotted for the study are treated as "correct cases" in the computation of case and payment accuracy rates.
- An error in sample design that resulted in misstatement of the FY 2001 payment accuracy projection was caused by a lack of statistical expertise among responsible staff.

- The study includes constructive awards that, because they always result in a zero payment amount, never meet the established criteria for a material error. The inclusion of cases that can never be associated with a measurable error tends to undermine the credibility of the assessment methodology.

We also observed that the annual study of initial case and payment accuracy could be more informative. The study's value as a risk assessment tool could be enhanced by expanding the study's scope to measure the monetary impact of three types of errors that are currently excluded from the computation of case and payment accuracy.

Finally, we have presented some observations about the effect of sample size on the usefulness and comparability of the estimates and projections produced by the annual studies of initial case and payment accuracy.

The OIG has recommended that the Office of Programs:

- develop a comprehensive methodology for estimating the frequency and monetary impact of improper payments;
- address weaknesses in the current methodology for assessing initial case and payment accuracy;
- provide training in applied statistics to responsible staff; and
- consider developing a methodology to measure the monetary impact of certain errors that are identified during the review process but do not meet the current study criteria for error measurement.

Management generally agrees with the findings and recommendations presented in the report. The full text of their response is included as Appendix V.

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## INTRODUCTION

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This report presents the results of the Office of Inspector General's (OIG) evaluation of the effectiveness of the Railroad Retirement Board's (RRB) quality assurance program in estimating the agency's exposure to improper payments in Railroad Retirement Act (RRA) programs.

### Background

The RRB is an independent agency in the executive branch of the Federal government. The RRB administers the health and welfare provisions of the RRA which provide retirement-survivor benefits for eligible railroad employees, their spouses, widows and other survivors. During fiscal year (FY) 2001, approximately 700,000 annuitants received benefits totaling \$8.5 billion under the RRA.

The RRB also administers the Railroad Unemployment Insurance Act (RUIA) which provides unemployment and sickness insurance to workers in the rail industry. During FY 2001, the RRB paid \$94.4 million to the 18,000 individuals qualifying for unemployment benefits and the 24,000 individuals qualifying for sickness benefits under the RUIA.

The President's Management Agenda, Fiscal Year 2002 includes a government-wide initiative for improved financial performance through the reduction of improper payments. Under this initiative, the administration will establish a baseline for erroneous payments and require agencies to include, in their fiscal year 2003 budget submissions, information on erroneous payment rates, including actual and target rates, where available. Using this information, the Office of Management and Budget (OMB) will work with agencies to establish goals to reduce erroneous payments for each program.

In October 2001, the General Accounting Office (GAO) published "Strategies to Manage Improper Payments," in which they identified best practices in combating improper payments.<sup>1</sup> In that report, the GAO observed that "without a systematic measurement of the extent of the problem, agency management cannot determine:

1. if the problem is significant enough to require corrective action,
2. how much to cost-effectively invest in internal control systems to correct the problem, or
3. the impact of the actions already taken to reduce improper payments or additional corrective actions needed."

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<sup>1</sup>GAO-02-69G

OMB now requires disclosure of information about improper payments in agency budget submissions. The Office of Programs performs annual studies of RRA case and payment accuracy which currently provide the basis for the RRB's estimates of improper payments.

### **Objective, Scope and Methodology**

The objective of this review was to evaluate the effectiveness of the RRB's quality assurance process in providing an estimate of improper payments resulting from the adjudication of initial applications for RRA benefits. In order to achieve this objective, we:

- reviewed the assessment methodology for published studies of initial case and payment accuracy for Employee Age and Service, Spouse, and Widow/Widower awards processed during FY 1996 through FY 2001;
- reviewed policies and procedures;
- reviewed documentation supporting the sampling methodology;
- interviewed responsible management and staff; and
- examined the documentation for selected individual cases in order to test the classification of errors identified during the FY 2001 quality assurance review.

The scope of this review did not include tests of the accuracy of individual case determinations. Accordingly, we did not test the individual case assessments made by the claims adjudication specialists in the Office of Programs.

This audit was conducted in accordance with generally accepted government auditing standards as applicable to the audit objectives. Fieldwork was conducted at RRB headquarters during May through July 2002.

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## RESULTS OF REVIEW

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The Office of Programs does not presently develop a comprehensive estimate of the monetary impact of improper payments. The RRB has used the Office of Programs' annual studies of initial and post adjudication accuracy when reporting to OMB on the cost of improper payments since it was first required in FY 2001. However, these studies are not an adequate long-term solution to the information needs associated with the President's national initiative to reduce improper payments.

We also performed a detailed review of the agency's annual study of RRA initial case and payment accuracy. Our examination disclosed that:

- study data is incomplete;
- the assessment methodology is not fully documented;
- a lack of statistical expertise leads to errors; and
- the treatment of constructive awards is problematic.

We also noted several instances in which the assessment methodology could be modified to offer additional information about the frequency and monetary impact of improper payments. In addition, we have presented our findings concerning the impact of sample size on study precision.

Management generally agrees with the findings and recommendations presented in this report. The full text of their response is included as Appendix V.

### **RRB Needs to Develop a Comprehensive Estimate of Improper Payments**

The RRB has not developed a comprehensive estimate of its exposure to loss from improper payments in the RRA benefit programs.

The GAO has stated that strong systems of internal control provide reasonable assurance that programs are operating as intended and are achieving expected outcomes. A key step in the process of gaining this assurance is conducting a risk assessment to identify and estimate the magnitude of improper payments.

According to the GAO, improper payments include:

- errors such as duplicate payments and miscalculations;
- unsupported or inadequately supported claims;
- payments to ineligible beneficiaries; and
- payments resulting from fraud and abuse.

In its FY 2003 budget submission to OMB, the RRB reported on the magnitude of erroneous payments using data from its two major annual quality assurance studies:

RRA initial applications and RRA post adjudication actions.<sup>2,3</sup> These studies estimated the agency's maximum financial exposure from claims adjudication errors at under \$1.1 million during FY 2000.<sup>4</sup> However, claims processing errors typically account for less than 3% of the approximately \$50 million in RRA overpayments identified annually.

These two studies do not offer a comprehensive estimate of the magnitude of improper payments because the quality assurance process was not designed to do so. The present assessment methodology, developed nearly 15 years ago by non-statisticians, was first created to respond to the question of accuracy within a very narrowly defined framework. That framework deliberately omits some payment categories from the assessment and excludes some errors from the computation of accuracy rates.

The current assessment methodology focuses on benefits paid to former railroad employees, their spouses, widows and widowers. These beneficiary groups were of primary interest to management at the time the formal quality assurance process was established because they represent the majority of the Office of Programs workload. In FY 2001, decisions on initial applications for employee, spouse and widow/widower benefits comprised approximately 75% of all initial decisions.

These studies do not offer information about other, smaller workloads such as children, widowed mothers and fathers with children in their care or lump sum death benefits. In addition, the two major studies do not measure the agency's exposure to fraud in RRA programs.

As a result, the RRB cannot rely on its assessments of initial and post adjudication accuracy as a basis for responding to the national initiative to reduce improper payments.

### Recommendation

We recommend that the Office of Programs develop a comprehensive methodology for estimating the number and monetary impact of improper payments (Recommendation #1).

### Management's Response

The Office of Programs agrees in principle. However, citing limited resources and expertise, they have asked for the OIG's assistance in developing the recommended methodology.

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<sup>2</sup> The agency's presentation disclosed that the estimates were limited to the claims of employees, spouses, widows and widowers.

<sup>3</sup> The term "post adjudication actions" refers to any adjustment after the award or denial of benefits.

<sup>4</sup> The FY 2000 estimates were the most recent available at the time that the agency submitted its FY 2003 budget request in FY 2001.

## **Assessment Methodology Is Not Fully Documented**

Key aspects of the methodology used to measure the case and payment accuracy of initial applications for RRA benefits, such as the determination of sample size, the method of sample selection, and the formulae used to project case and payment accuracy, are not fully documented.

In addition, documentation describing the current assessment methodology does not explain the exclusion of errors corrected after the date of the initial award (but prior to the quality assurance review) or errors in the computation of temporary work deductions.<sup>5</sup> Based on the published documentation, we would expect these types of errors to be included in the studies' scope.

The quality assurance program is an important control activity. As such, it should be clearly documented and the documentation should be readily available for examination.

The basic assessment methodology is documented in the report that presents the results of each annual study. However, that document does not address the method used to determine sample size. The determination of sample size is documented separately in the Office of Programs' files. Sample selection procedures have not been documented and the formulae used to compute accuracy rates, estimate precision and project payment accuracy are not available for review outside of the electronic database in which they were programmed.

At the time the study was designed, management did not want to capture data about errors that would be corrected at a later date. However, this treatment is not entirely consistent with the study's published definitions of payment accuracy. That definition, presented in full in Appendix I, refers to "dollars paid and payable on the annuity beginning date."

During our review of the printed results of the payment accuracy projection, we had observed that some of the numbers did not appear to carry the correct label. We questioned whether the computation was incorrect or the item had been mislabeled. The Office of Programs could not respond to the question because the formulae used to program the calculation had not been documented in their files.

The lack of comprehensive documentation for the assessment methodology undermines its reliability and credibility.

### Recommendation

The Office of Programs should develop comprehensive documentation for all aspects of its assessment methodology (Recommendation #2).

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<sup>5</sup>Work deductions, imposed on individuals as a result of post-retirement earnings, reduce the amount of benefits payable.

## Management's Response

The Office of Programs agrees with the recommendation.

### **Study Data Is Incomplete**

The study of initial case and payment accuracy is published without a final accuracy assessment for every case in the sample. Cases for which an accuracy decision could not be confirmed within the timeframe allotted for the study are treated as "correct cases" in the computation of case and payment accuracy rates.

A properly designed and executed statistical sample will offer an objective, defensible basis for inferences about the population from which it was drawn. All items selected for review in a statistical sample should be fully evaluated in order to ensure that the resulting data provide a valid basis for inferences about the population.

In some circumstances, claims adjudication specialists reviewing sample cases may need additional information before finalizing their accuracy determination. If that information cannot be obtained within the timeframe allotted for the study, the case is classified as a "potential error" and is included in the computation of case and payment accuracy rates as if it were correct.

If all the items in the sample are not evaluated, the resulting inferences about the characteristics of the full population may be incorrect. A summary of the number of pending decisions by fiscal year follows.

### **Potential Errors Reported FYs 1996 - 2001**

		<b>Potential Errors Reported</b>	
<b>FY</b>	<b>Sample Size</b>	<b>Number</b>	<b>Percentage of the Sample</b>
2001	468	15	3.21%
2000	367	19	5.18%
1999	375	14	3.73%
1998	400	24	6.00%
1997	611	29	4.75%
1996	592	25	4.22%

The use of the "potential error" classification is fully disclosed in the detailed report of study findings. However, this treatment sacrifices accuracy for timeliness and undermines the credibility and comparability of study data.

Although many potential errors are ultimately determined to be correct, this is not always true. In addition, there are considerable delays in obtaining decisions in these cases. As of September 2002, decisions were still outstanding for 10 of the potential errors in the FY 2001 study and in some cases dating as far back as FY 1997.

The Office of Programs' study of post adjudication processing also uses the potential error classification.

### Recommendation

We recommend that the Office of Programs modify the timeframes for its studies of case and payment accuracy to permit a final decision about the accuracy of all sample cases prior to publication of the study results (Recommendation #3).

### Management's Response

The Office of Programs will consider approaches to dealing with this recommendation, and the impact on their annual performance report.

### **Lack of Statistical Expertise Leads to Errors**

During our review of the FY 2001 study of initial payment accuracy, we identified an error in the sample design that was caused by a lack of statistical expertise among responsible staff. As a result, the projection of payment accuracy based on the sample results was misstated.

Management should ensure that skill needs are continually assessed and that the organization has the skill required to achieve organizational goals.

An agency statistician assists the Office of Programs in determining the size of the samples used in its accuracy studies. The current assessment methodology calls for stratified sampling. In stratified sampling, the sample is composed of two or more "strata" representing the various subgroups in the larger population. The number of sample items in each stratum is determined through the use of established statistical methods.

In FY 2001, the recommended sample size was 253 initial awards allocated into three strata based on type of annuitant: employee, spouse and widow/widower. However, the Office of Programs increased the number of spouse and widow payments in the sample in order to enhance the precision of their estimates for those two groups.

	Universe		STRATIFIED RANDOM SAMPLE			
			<i>As Planned</i>		<i>As Executed</i>	
Employee	11,129	40%	69	27%	69	15%
Spouse	7,220	26%	71	28%	199	43%
Widow(er)	9,614	34%	113	45%	200	43%
	=====	=====	=====	=====	=====	=====
Total	27,963	100%	253	100%	468	100%

After inclusion of the additional spouse and widow/widower cases, the sample was no longer a statistically valid model on which to base projections about the population. The altered sample did not properly conform to the methodology recommended by the consulting statistician, nor did it conform to another valid stratification method. Management and staff responsible for the decision to augment the samples did not understand the impact that the changes would have on the study outcome.

Although projections of overall case accuracy are adjusted for inaccuracies in sample stratification, payment accuracy projections are not similarly adjusted. Since the number and monetary impact of errors may vary significantly between the three types of awards, this type of error can significantly misstate projections.

We have been advised that the sample size used in the FY 2002 study, which is still in progress, has been similarly augmented.

### Recommendations

We recommend that the Office of Programs:

- provide responsible management and staff with additional training in applied statistics (Recommendation #4); and
- develop a control to ensure that changes to the assessment methodology are made in consultation with individuals who have the knowledge, skill and abilities to recognize all potential impacts (Recommendation #5).

### Management's Response

The Office of Programs has agreed to determine a strategy and develop a plan to provide additional training to responsible management and staff. They will address the recommendation for a control over changes to the assessment methodology when they develop comprehensive documentation for the process (see recommendation #2).

## **The Inclusion of Constructive Awards Is Problematic**

The inclusion of constructive awards in the annual study of initial case and payment accuracy is problematic because, under current study parameters, they are always classified as “correct cases.”

The samples that are evaluated during the assessment process are selected from initial payment vouchers processed during the year. In some cases, a widow or widower may become eligible for benefits but their continued employment results in a reduction of benefits based on the amount of reported earnings (a work deduction). When the work deductions exceed the amount of benefits payable, the award process results in a payment voucher with a net payable amount of zero. Such cases are known as “constructive awards.”

The study parameters measure only the cost of material errors which are defined in terms of monetary impact on the recurring benefit rate. Because constructive awards, by definition, do not result in the establishment of a recurring cash payment, errors in the computation of the benefit amount are never classified as material errors. Error categories used in reporting study results are defined in Appendix II.

Constructive awards cannot be associated with an error that would impact the estimate of case or payment accuracy rates. Since constructive awards always have zero payment amounts, errors in their computation never meet the study’s criteria for a material error. Only the incorrect processing of a constructive award, in which a recurring payment was due but none awarded, would be classified as a material error for purposes of the study.

The rationale for the current treatment of constructive awards is based on strict application of the established assessment methodology as follows:

- constructive awards must be included in the population of payments subject to the review process because a payment voucher documents the outcome of the adjudication process; and
- errors in the adjudication of constructive awards must be excluded from the accuracy computation because no payment results from the benefit computation.

The above rationale is based on the literal application of the established criteria for identifying the study’s universe and assessing material errors. However, the inclusion of cases that can never be associated with a material error tends to undermine the credibility of the assessment methodology.

The unique nature of these cases suggests that it might be more informative to perform a separate evaluation of constructive awards.

## Recommendation

The Office of Programs should reassess the treatment of constructive awards in its evaluations of case and payment accuracy (Recommendation #6).

## Management's Response

The Office of Programs agrees with the recommendation.

### **The Study Could Be More Informative**

The RRB's study of initial case and payment accuracy could be more informative. The study's value as a risk assessment tool could be enhanced by expanding the study's scope to measure the monetary impact of three types of errors that are currently excluded.

The Office of Programs' study of initial case and payment accuracy for RRA benefit programs does not measure the occurrence rate or monetary impact of:

- errors corrected prior to the quality assurance review; or
- errors related to temporary work deductions.

In addition, the projection of the monetary impact of payment errors does not include the cost of non-recurring errors.

The GAO has identified "a systematic process to estimate the level of improper payments" as a critical part of the risk assessment process. In the absence of a comprehensive method of estimating exposure to improper payments in RRA programs, the Office of Programs' annual studies of initial and post adjudication accuracy have provided the basis for meeting current OMB reporting requirements on this subject.

A detailed discussion of these three error categories follows.

### Errors Corrected Prior to Review

The current assessment of initial case and payment accuracy does not measure the occurrence rate or cost of errors that have been corrected prior to the review.

Payments are selected for review from the population of initial awards. An award represents the result of the adjudicative process as of the date that the award was processed for payment. However, the evaluation of case and payment accuracy considers adjustments made after the date of the initial award selected for review.

Although an initial award has been processed to payment, system edits, review referrals and other controls continue to operate to minimize the risk that an error will occur and

go undetected. When the assessment methodology was developed, management wanted to consider the effect of this extended process. As a result, the current assessment methodology does not measure the occurrence rate or monetary impact of errors corrected between the time the initial award is processed and the time it is subject to a quality assurance review.

As discussed earlier in this report, the treatment of errors corrected prior to the quality assurance review is not consistent with the published scope of the study.

### Errors in Temporary Work Deductions

Case and payment accuracy statistics produced by the current assessment methodology exclude the impact of errors related to the computation of temporary work deductions. Work deductions are imposed on individuals who return to employment after retirement. Work deductions reduce the amount of benefits payable. The amount of the reduction is determined by the amount of the annuitant's post-retirement earnings.

Temporary work deductions are imposed at the time of initial adjudication using the best available information about the retiree's employment. Subsequently, when final information has been obtained, permanent work deductions will be imposed.

When the methodology was developed, management was not interested in capturing data about errors if future correction could be anticipated. The assessment methodology excludes these errors from the computation of case and payment accuracy statistics because errors in the assessment of temporary work deductions should be corrected when permanent work deductions are imposed at a later date.

Errors in the computation of temporary work deductions are not corrected until after the annuity has been placed into pay status. Erroneous payments continue until the case has been re-adjudicated to impose permanent work deductions. As a result, the current assessment methodology does not measure the occurrence rate or monetary impact of errors related to the imposition of temporary work deductions.

As discussed earlier in this report, the treatment of temporary work deductions is not consistent with the published scope of the study.

### Non-Recurring Errors

The assessment methodology used to measure the payment accuracy of decisions on initial applications for RRA benefits includes only errors that impact the recurring benefit payment amount.

Non-recurring errors do not impact the current benefit amount. When corrected, non-recurring errors result in the payment of accrued benefits, or the establishment of an

account receivable according to whether the error caused an underpayment or an overpayment.

As a result, the cost of errors that do not impact the recurring benefit payment amount are excluded from the projection of monetary impact.

Although the study of initial payment accuracy captures the cost of non-recurring errors in the sample, those amounts are excluded from the projection of payment accuracy. As a result, the current assessment methodology does not measure the monetary impact of non-recurring payment errors.

The treatment of non-recurring errors appears to be consistent with the published scope of the study which defines the types of errors measured by the study in terms of the monthly annuity rate.

### Recommendations

The Office of Programs should consider developing a methodology to measure the monetary impact of errors:

- that are later corrected as a result of system edits, review referrals and other controls (Recommendation #7);
- for which later correction is anticipated, as in the case of temporary work deductions (Recommendation #8); and
- that do not affect recurring payment rates (Recommendation #9).

### Management's Response

The Office of Programs will reassess the current treatment of all three categories of errors cited and determine whether change is feasible.

### **Precision Levels May Not Be Adequate**

The precision levels achieved in the annual study of RRA initial case and payment accuracy vary widely from year to year in all reporting categories, except overall case accuracy.

One of the advantages of statistical sampling is that the results are evaluated in terms of how far the sample estimate might deviate from the value that could be obtained by examining 100% of the items in a population. Precision refers to a percentage or value that quantifies the extent to which the sample results may differ from the actual condition in the population from which the sample was drawn.

## Payment Accuracy

During our review, we observed very broad estimates of monetary impact that vary greatly from year-to-year and some unexpected relationships among the data that may be due to the small sizes used in the study.

For example, the FY 1999 study reported an overall loss of case accuracy when compared with the FY 1998 study. However, the payment accuracy rate had improved while the maximum monetary impact associated with errors had increased. We would have expected an improvement in accuracy to be associated with a reduction in the cost of errors.

Management has not established a target for the precision of payment accuracy estimates. The current assessment methodology determines sample size for the purpose of estimating overall case accuracy within a desired range of precision using existing information about the occurrence rate of errors. The estimation of payment accuracy within a similarly defined precision range uses a different statistical technique and would typically result in much larger sample sizes than those used in estimating case accuracy.

Since the study is not specifically designed to measure payment accuracy within a desired range of precision, changes in the magnitude of financial impact from year to year will not support inferences about the effect of changes in the processing environment. However, the precision levels currently being achieved may be sufficient for management's purpose when the cost of expanding sample size is compared with the benefit of enhanced precision.

We offer these observations for management's consideration in developing a comprehensive estimate of the financial impact of improper payments. A presentation of selected case and payment accuracy statistics is presented in Appendix III.

## Case Accuracy

The Office of Programs' annual studies of case and payment accuracy are designed to offer a basis for inferences about the accuracy of the combined population of employee, spouse and widow/widower awards. As a result, the studies' estimates of overall case accuracy achieve at least the planned precision level of +/- 2.5%. However the precision levels achieved in estimating case accuracy for each of three beneficiary groups varies widely from year to year.

In 1999, the OIG issued a management information report, "Payment and Case Accuracy Issues Related to the Financial Statement Audit."<sup>6</sup> In that report, the OIG noted that the statistical precision achieved by the annual study of initial case and payment accuracy was sufficient to indicate upward and downward trends over time, but would not support the measurement of incremental improvement from year to year.

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<sup>6</sup> Audit Report Number 99-07, March 24, 1999

The OIG's finding was based on the broad precision ranges of case accuracy for the three strata that comprise the study population. The OIG recommended that the Office of Programs design a plan for statistical measurement of case accuracy that would provide meaningful feedback on the effectiveness of agency case accuracy initiatives.

The Office of Programs agreed in principle with the OIG's recommendation. However, after extensive discussion, they requested that the recommendation be closed with a guarantee that they would continue to focus on this area in planning for future studies. They have done so. The sample sizes for the spouse and widow/widower beneficiary groups were augmented to improve the precision of those strata in the FY 2001 and FY 2002 studies.

Since management is aware of the issues related to the precision of estimates of the population subgroups and has been responsive to prior OIG recommendations, the OIG will make no further recommendations concerning this matter at the present time. Case accuracy estimates and precision levels resulting from the Office of Programs' studies of case and payment accuracy for FYs 1996 through 2001 are presented in Appendix IV.

## Study of Initial Case and Payment Accuracy Background

The following background information was excerpted from the Office of Programs FY 2000 Study of Initial Case and Payment Accuracy.

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### Purpose

Assessment and Training, Program Evaluation/Quality Assurance (QA) continued the ongoing study of initial employee age and service, spouse and widow(er) application processing. (For the sake of simplicity, employee age and service and widow(er) will be referred to as employee and widow, respectively, through the remainder of this report.) The intent of the study is to document key indicators of the quality of service provided by the Railroad Retirement Board (RRB) in administering the Railroad Retirement Act (RRA). The key indicators examined in this report are derived from a review of a stratified random sample of initial applications processed in fiscal year (FY) 2000.

### Methodology

Sample cases were reviewed to determine accuracy and compliance with policies and procedures. In addition, the reviews also provided information about causes for particular errors and other general information about the employee, spouse and widow claims process.

## Study of Initial Case and Payment Accuracy Background

### Measurement of Case Accuracy

The case accuracy rate measures the percentage of cases that do not contain a material error inside the sample profile. A case contains a material error if it meets the following criteria: (1) an incorrect payment which has accumulated to a total of \$5.00 or more at the point the error is identified by QA, (2) an incorrect payment of less than \$5.00 which totals 1% or more of the monthly annuity rate, or (3) any situation in which a non-entitled benefit is paid. Case accuracy rates reflect only those errors which are detected as a result of reviewing award actions performed during the FY being studied.

### Measurement of Payment Accuracy

The payment accuracy rate measures the percentage of dollars paid correctly as a result of adjudication actions performed during the FY being studied. For initial cases, the percentage is calculated using the dollars paid and payable on the annuity beginning date (ABD).

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**Study of Initial Case and Payment Accuracy  
Error Categories**

The following background information was excerpted from documentation provided by the Office of Programs.

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Material Error Inside Profile

This is a situation in which the case contains an error relating to the payment of the sample award that we are reviewing. For example: we select initial employee case for review. We determine that the Tier 1 calculation is incorrect from the annuity beginning date resulting in an incorrect monthly rate and a dollar error amount which totals more than \$5.00. This would affect both payment and case accuracy rates.

Material Error Outside Profile

This is a situation in which the case contains a material error not related to the sample award that we are reviewing. For example: An employee and spouse have the same annuity beginning date. We select an initial employee for review. The employee Tier 2 is incorrect from his annuity beginning date and the accrued dollar impact is more than \$5.00. Since the spouse annuity was paid based on the employee, her Tier 2 is also incorrect. The employee error is inside profile error and affects case and payment accuracy. The spouse is an outside profile error and does not affect either.

**Study of Initial Case and Payment Accuracy**  
**Error Categories**

Potential or Pending Issue

A potential error is a situation in which the case requires additional development that could result in a material error. For example: A discrepancy is found on several wage records in file regarding the employee's number of creditable military service months. We are unable to determine the correct number of creditable military service months. Since this can affect the employee's annuity rate, we need a resolution before a final determination can be made as to the existence of a material error.

Not Material Error

This type of case generally requires additional work but does not contain a material error. For example: There is correspondence in the file and there is no indication of a response.

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**Selected Case and Payment Accuracy Statistics**

Presented below are selected case and payment accuracy statistics resulting from the Office of Programs annual study of RRA initial case and payment accuracy.

<u>OVERALL</u>			<b>PROJECTED MONETARY IMPACT OF ERRORS</b>		
<b>Fiscal Year Studied</b>	<b>Case Accuracy Rate</b>	<b>Payment Accuracy Rate</b>	<b>The total monetary value of errors in decisions on initial applications for employee, spouse and widow benefits was estimated to fall between . .</b>		
			<b>Lower Limit</b>	<b>Upper Limit</b>	<b>Range Of The Projection</b>
FY 2001	96.0%	99.89%	\$65,434	\$654,339	\$588,905
FY 2000	96.1%	99.87%	\$30,067	\$781,751	\$751,684
FY 1999	93.7%	99.68%	\$0	\$2,140,689	\$2,140,689
FY 1998	94.5%	99.64%	\$29,966	\$2,097,649	\$2,067,683
FY 1997	92.6%	99.75%	\$87,808	\$1,375,660	\$1,287,852
FY 1996	92.7%	99.45%	\$204,577	\$3,010,212	\$2,805,635

See Appendix I for background information defining the terms “Case Accuracy” and “Payment Accuracy.”

**Case Accuracy Estimates FY 1996 - 2001**

Presented below are case accuracy statistics taken from annual reports of RRA initial case and payment accuracy for FYs 1996 through 2001.

**Employee Awards**

	<b>Sample Accuracy</b>	<b>The true accuracy rate is between . . .</b>	<b>Or the Precision of the Sample is ....</b>
2001	98.6%	95.8% <i>and</i> 100.0%	+/- 2.8%
2000	100.0%	<i>Not lower than 97.1%</i>	----
1999	97.3%	94.3% <i>and</i> 100.0%	+/- 3.0%
1998	96.0%	92.2% <i>and</i> 99.8%	+/- 3.8%
1997	96.4%	93.5% <i>and</i> 99.3%	+/- 2.9%
1996	94.7%	91.1% <i>and</i> 98.3%	+/- 3.6%

**Spouse Awards**

	<b>Sample Accuracy</b>	<b>The true accuracy rate is between . . .</b>	<b>Or the Precision of the Sample is ....</b>
2001	98.0%	96.0% <i>and</i> 100.0%	+/- 2.0%
2000	95.6%	92.2% <i>and</i> 99.0%	+/- 3.4%
1999	93.2%	88.6% <i>and</i> 97.8%	+/- 4.6%
1998	93.8%	89.6% <i>and</i> 98.0%	+/- 4.2%
1997	92.6%	89.0% <i>and</i> 96.2%	+/- 3.6%
1996	94.1%	90.9% <i>and</i> 97.3%	+/- 3.2%

**Widow Awards**

	<b>Sample Accuracy</b>	<b>The true accuracy rate is between . . .</b>	<b>Or the Precision of the Sample is ....</b>
2001	91.5%	87.6% <i>and</i> 95.4%	+/- 3.9%
2000	93.7%	89.5% <i>and</i> 97.9%	+/- 4.2%
1999	91.8%	87.3% <i>and</i> 96.3%	+/- 4.5%
1998	94.2%	90.7% <i>and</i> 97.7%	+/-3.5%
1997	90.1%	86.3% <i>and</i> 93.9%	+/-3.8%
1996	90.3%	86.5% <i>and</i> 94.1%	+/- 3.8%

Case Accuracy Estimates FY 1996 - 2001

Overall

	<b>Sample Accuracy</b>	<b>The true accuracy rate is between . . .</b>	<b>Or the Precision of the Sample is ....</b>
2001	96.0%	94.2% <i>and</i> 97.8%	+/- 1.8%
2000	96.1%	94.1% <i>and</i> 98.1%	+/- 2.0%
1999	93.7%	91.2% <i>and</i> 96.2%	+/- 2.5%
1998	94.5%	92.3% <i>and</i> 96.7%	+/- 2.2%
1997	92.6%	90.5% <i>and</i> 94.7%	+/- 2.1%
1996	92.7%	90.6% <i>and</i> 94.8%	+/- 2.1%



UNITED STATES GOVERNMENT  
**MEMORANDUM**

FORM G-1157 (3-92)  
RAILROAD RETIREMENT BOARD

OCT 02 2002

**TO:** Henrietta Shaw  
Assistant Inspector General, Audit

**FROM:** Catherine A. Leyser *Catherine A. Leyser*  
Director of Assessment and Training

**THROUGH:** B. V. Ferguson *B. V. Ferguson*  
Director of Programs

**SUBJECT:** Draft Audit Report – Effectiveness of the RRA Quality Assurance  
Process in Estimating Exposure to Improper Payments

## Response to Draft Audit Report – RRA Quality Assurance

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**General  
Comments**

We appreciate the effort that the OIG staff put into this review, and will take corrective action where possible to ensure that our reporting of Quality statistics is accurate and well documented.

As is pointed out in the audit report, the RRA Quality Assurance process was designed well before the initiatives to estimate improper payments. While the agency used its available quality statistics in its 03 and 04 budget submissions, in response to the Office of Management and Budget directive, we have been careful to point out the inadequacy of these statistics in estimating improper payments. That's simply not what the QA process was designed to do.

In response to recommendation 1, we indicate our willingness, but lack of sufficient staff and expertise to develop a methodology that will enable the agency to do a credible job in response to the OMB directive at this time. We would be concerned about what wouldn't get accomplished if we were to devote resources to this initiative. However, that said, we welcome any suggestions or assistance the OIG can provide in helping us use existing information in formulating our estimates of improper payments. Please let us know if you can provide this assistance, and if so, how we might best approach it.

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*Continued on next page*

## Response to Draft Audit Report – RRA Quality Assurance,

Continued

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**General  
Comments  
cont'd**

Regarding the discussion on page 8 of sample size and our decision to augment the number of spouse and widow(er) cases reviewed in FY 01 and 02, as you point out we did this in order to improve the precision of our review of these more error-prone workloads. While we did discuss this with our statistician, we did not realize the impact it would have on the payment accuracy data. Essentially, as we now understand it, by over-sampling these two groups, we ended up causing the payment accuracy statistics for the universe to be *understated*. When we determine the proper way to adjust our data to compensate for this over-sampling, we will revise those payment accuracy statistics and use the revised data in future publications. We expect that it will be a higher number than what was originally published.

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**Recommendation  
1**

We recommend that the Office of Programs develop a comprehensive methodology for estimating the number and monetary impact of improper payments (Recommendation #1).

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**OP Response**

While we agree in principle, we do not have the resources or the expertise to take on this kind of project and cannot offer a target date at this time. We would appreciate any assistance the OIG could offer in developing such a methodology.

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**Recommendation  
2**

The Office of Programs should develop comprehensive documentation for all aspects of its assessment methodology (Recommendation #2).

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**OP Response**

We agree. We will have this completed by September 30, 2003.

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**Recommendation  
3**

We recommend that the Office of Programs modify the timeframes for its studies of case and payment accuracy to permit a final decision about the accuracy of all sample cases prior to publication of the study results (Recommendation #3).

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**OP Response**

We will consider approaches to dealing with this recommendation, and the impact on our annual performance report. We will have a response by December 30, 2002.

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*Continued on next page*

## Response to Draft Audit Report – RRA Quality Assurance,

Continued

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**Recommendation 4** We recommend that the Office of Programs:

- provide responsible management and staff with additional training in applied statistics (Recommendation #4);

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**OP Response** We will determine a strategy and develop a plan for approaching this by March 31, 2003.

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**Recommendation 5** We recommend that the Office of Programs:

- Develop a control to ensure that changes to the assessment methodology are made in consultation with individuals who have the knowledge, skill and abilities to recognize all potential impacts (Recommendation #5).

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**OP Response** This will be included in our documentation of our quality assurance assessment methodology. We will do this by September 30, 2003.

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**Recommendation 6** The Office of Programs should reassess the treatment of constructive awards in its evaluations of case and payment accuracy.(Recommendation #6).

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**OP Response** We will do this reassessment by January 31, 2003. We will be discussing this with our customers and we will make a decision prior to the start of the FY 2003 study cycle.

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**Recommendation 7** The Office of Programs should consider developing a methodology to measure the monetary impact of errors:

- that are later corrected as a result of system edits, review referrals and other controls (Recommendation #7);

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**OP Response** We will do this reassessment by January 31, 2003. We will discuss this with our customers and if there is a change we can implement it effective with FY 2003 study cycle.

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*Continued on next page*

## Response to Draft Audit Report – RRA Quality Assurance,

Continued

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**Recommendation 8** The Office of Programs should consider developing a methodology to measure the monetary impact of errors:

- for which later correction is anticipated, as in the case of temporary work deductions (Recommendation #8).

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**OP Response** We will do this reassessment by January 31, 2003. We will discuss this with our customers and if there is a change we can implement it effective with FY 2003 study cycle.

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**Recommendation 9** The Office of Programs should consider developing a methodology to measure the monetary impact of errors:

- that do not affect recurring payment rates (Recommendation #9).

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**OP Response** While we do reflect the monetary value of the non-recurring errors in our reports, we have not been able to develop a viable methodology for reflecting this information in our statistics. We will investigate how to do this by January 31, 2004. We would appreciate any assistance or guidance the OIG can give us in this.

Then we will discuss and consider all options with our customers.

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cc: Director of Operations  
Director of Policy and Systems  
Director of Field Service  
Chief, Program Evaluation, Ret/Surv/Tax/Medicare  
Supervisory Quality Assurance Specialist